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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,648	09/28/2001	Keiji Yoshimura	862.C2397	1952
5514	7590	10/06/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			CABRERA, ZOILA E	
			ART UNIT	PAPER NUMBER
			2125	

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/964,648

Applicant(s)

YOSHIMURA, KEIJI

Examiner

Zoila E. Cabrera

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 28-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Final Rejection*

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-27 have been cancelled.

New claims 28-35 have been presented for consideration.

### ***Claim Rejections - 35 USC § 102***

2. Claims 28-34 are rejected under 35 U.S.C. 102(e) as being anticipated by **Nishi (US 6,462,807)**.

Regarding claims 28-34, Nishi discloses:

- An exposure apparatus for exposing a substrate to a pattern (Col. 1, lines 28-31; Col. 5, lines 34-36), said apparatus comprising:  
an input unit which inputs an exposure condition (Col. 5, lines 36-39; Col. 16, lines 22-30); and a determining unit which determines whether the substrate should be exposed while scanning the substrate at a changing speed corresponding to a speed within at least one of an acceleration period and a deceleration period in a target speed profile of the substrate, based on the exposure condition (Col. 5, lines 36-40, i.e., an exposure method having the shorter time is selected; Col. 20, lines 29-31, i.e., exposure time depends on scan velocity of the reticle; Col. 5, lines 49-60; Col. 6, lines 25-30);

- The exposure condition includes at least one of a spot size, a shot layout of an exposure to be performed, and alignment measure, a shot layout of an exposure having been performed, a user's indication, a shot position and an accuracy required with respect to scanning the substrate (Col. 16, lines 22-26, i.e., a layout of shot regions on the wafer or a shot layout is inputted by an operator as conditions);
- An original stage for holding an original having the pattern and a substrate stage for holding the substrate (Fig. 3), wherein the exposure condition includes a synchronization accuracy with respect to scanning said original stage and said substrate stage (Col. 3, lines 56-60; Col. 17, lines 46-49);
- A device manufacturing method, comprising: a step of exposing a substrate to a pattern using an exposing apparatus defined in claim 28 (Fig. 3; Col. 5, lines 36-40);
- An exposure apparatus for exposing a substrate to a pattern, said apparatus comprising: an evaluation unit which evaluates whether a previous measure with respect to a substrate can be used; and a determining unit which determined which should be used among at least two exposure methods, based on an evaluation result of said evaluation unit (Col. 5, lines 36-40, i.e., evaluation unit corresponds to calculation of exposure time on the basis of a layout of the shot regions, required quantity of integrated exposure, etc. The determining unit, Fig. 13, element 79, selects an exposure method having the shorter exposure time).

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- At least two exposure methods include at least one of (i) *a static exposure with the substrate standing still while the substrate is exposed*, (ii) *a constant speed exposure with the substrate running at a constant speed while the substrate is exposed*, and (iii) *a changing speed exposure with the substrate running at a changing speed while the substrate is exposed* (Col. 18, lines 52-54);
- A device manufacturing method, comprising: a step of exposing a substrate to a pattern using an exposing apparatus defined in claim 32 (Fig. 3; Col. 5, lines 36-40).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishi (US 6,462,807).

Regarding claims 35-36, Nishi discloses an exposure apparatus for exposing a substrate to a pattern, said apparatus comprising: an input unit which inputs an exposure condition; and a determining unit which determines which should be used among at least two exposure methods, based on the exposure condition (Col. 16, lines 22-30; Col. 5, lines 36-39). Nishi further discloses a step of exposing a substrate to a pattern using an exposure apparatus (Fig. 13).

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Nishi does not specifically disclose if a manual mode is specified as one of the exposure conditions, said determining unit performs the determination based on a user's indication.

However, Nishi discloses that the operator supplies information or conditions such as a kind of the reticle to be exposed next, the photosensitivity of a photoresist on the wafer, a layout of shot regions on the wafer, etc. and thereafter an exposure mode to be used is determined (Col. 16, lines 22-30). Therefore it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to specify a manual mode as one of the conditions and thereafter the exposure mode would be determined based on such condition because it would provide a user friendly system that would allow the operator to choose the corresponding exposure mode such as manual mode.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-27, regarding the restrictions requirement, have been considered but are moot since applicant cancelled claims 1-27.

As for new claims 28-35, Applicant argues that Nishi does not disclose the recited limitations of each corresponding claim. Examiner disagrees as stated above in paragraphs 2 and 3.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

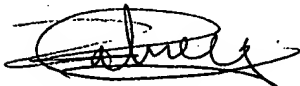
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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning communication or earlier communication from the examiner should be directed to Zoila Cabrera, whose telephone number is (571) 272-3738. The examiner can normally be reached on M-F from 8:00 a.m. to 5:30 p.m. EST (every other Friday).

If attempts to reach the examiner by phone fail, the examiner's supervisor, Leo Picard, can be reached on (571) 272-3749. Additionally, the fax phones for Art Unit 2125 are (703) 872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist at (703) 305-9600.



Zoila Cabrera  
Patent Examiner  
10/3/05